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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: ZACHRIE

Serial No.: 09/976,249

Group Art Unit: 1616

Filed: October 15, 2001

Examiner: Unassigned

For: DIOXOLANE ANALOGS FOR IMPROVED INTER-CELLULAR DELIVERY

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Assistant Commissioner for Patents  
Washington, D. C. 20231

Sir:

CITED MATERIALS

Applicant(s) hereby disclose the information listed in the attached form PTO-1449.

- Copies of materials listed but not attached were cited in parent application Serial No. \_\_\_\_; see 37 C.F.R. § 1.98(d).
- Copies of materials listed but not attached were cited in an International Search Report dated \_\_\_\_; receipt of the International Search Report and copies of references was confirmed by the PCT International Division of the U.S. PTO in the Notice of Acceptance mailed \_\_\_\_.

ADDITIONAL INFORMATION

[NONE?]

LANGUAGE

- All listed materials are in the English language; see 37 C.F.R. § 1.98.
- Non-English language references:
- The reference(s): \_\_\_\_\_ in the English-language is (are) indicated by commercial data bases to correspond to the reference(s): \_\_\_\_\_, respectively.
- (An) English-language translation(s) of the references: \_\_\_\_\_ is (are) provided.
- A commercial English-language abstract of reference(s) \_\_\_\_\_ is (are) provided.
- An English-language search report or an equivalent paper from a foreign patent office translated into English in pertinent part in connection with a counterpart foreign application, is provided indicating the relevance of the cited reference(s).

FEES

- No fee is required for this Information Disclosure Statement because:
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CERTIFICATION

- Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned, having made reasonable inquiry, no such item was known to any individual designated in 37 CFR § 1.56(c), more than three months prior to the filing of this statement.

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If a fee is due, attached is a check in the amount of \$ \_\_\_\_\_. However, the Commissioner is hereby authorized to charge fees under 37 CFR § 1.16 and § 1.17 which may be required to facilitate this filing, or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,



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Attorney Docket No.: PHARMA-123

Date: May 7, 2002  
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Application Number	PHARMA-123
Filing Date	October 15, 2001
First Named Inventor	BOULOUS ZACHARIE et al.
Group Art Unit	1616
Examiner Name	Unassigned
Attorney Docket Number	PHARMA-123

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	M.P.. DI MARCO ET AL., <u>Journal of Chromatography</u> , 645, (1993) 107-114 Elsevier Science Publishers, B.V. Amsterdam, "High-performance liquid chromatographic determination of the isomeric purity of a series of dioxolane nucleoside analogues".	
	2	HAOLUN JIN ET AL. <u>Tetrahedron Asymmetry</u> Vol. 4, No. 2 pp 211-214, 1993, "Unexpected Effects of Lewis Acids in the Synthesis of Optically Pure 2'-Deoxy-3'-oxacytidine Nucleoside Analogues"	
	3	COLLEEN A. EVANS ET AL. <u>Tetrahedron: Asymmetry</u> Vol. 4, No. 11, pp. 2319-2322, 1993 "Divergent Asymmetric Syntheses of Dioxolane Nucleoside Analogues"	
	4	ARSHAD SIDDIQUI ET AL., <u>Bioorganic &amp; Medicinal Chemistry</u> , Vol. 3, No. 8, pp. 1543-1546, 1993, "Antiviral Optically Pure Dioxolane Purine Nucleosides Analogues"	
	5	BERNARD R. BELLEAU ET AL., <u>Tetrahedron Letters</u> , Vol. 33, No. 46, pp. 6949-6952, 1992 "Oxidative Degradation of L-Ascorbic Acid Acetals to 2',3'-Dideoxy-3'-Oxaribofuranosides. Synthesis of Enantiomerically Pure 2',3'-Dideoxy-3'-Oxacytidine Stereoisomers as Potential Antiviral Agents"	
	6	HEA O. KIM ET AL., <u>Tetrahedron Letters</u> , Vol. 33, No. 46, pp. 6899-6902, 1992, "Potent Anti-HIV and Anti-HBV Activities (-)-L-β-Dioxolane-C and (+)-L-β-Dioxolane-T and Their Asymmetric Syntheses"	
	7	JOHN R. MACKEY ET AL., <u>Cancer Research</u> , 58, 4349-4357, October 1, 1998 "Functional Nucleoside Transporters Are Required for Gemcitabine Influx and Manifestation of Toxicity in Cancer Cell Lines"	
	8	KRISTIE L. GROVE AND UUNG-CHI CHENG, <u>Cancer Research</u> , 56, 4187-4191, September 15, 1996, "Uptake and Metabolism of the New Anticancer Compound β-L-( $\cup$ -Dioxolane-Cytidine in Human Prostate Carcinoma DU-145 Cells"	
	9	US Patent 5,041,449, Belleau et al.	
	10	US Patent 5,817,667, Chu et al.	
	11	WENDY P. GATI AND ALAN R. P. PATERSON, <u>The American Society for Pharmacology and Experimental Therapeutics, Molecular Pharmacology</u> , 36:134-141, "Interaction of (3H) Dilazep at Nucleoside Transporter-Associated Binding Sites on S49 Mouse Lymphoma Cells"	

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	12	Proc. Amer. Assoc. Cancer Res. 37:405 (1996), "Use of SAENTA-fluorescein in a flow cytometric assay of cellular es nucleoside transporter site abundance, a correlate of chemosensitivity to cytarabine in acute myeloid leukemia cells"	
	13	KATHRYN A. GRAHAM ET AL., <u>Nucleosides, Nucleotides &amp; Nucleic Acids</u> , (19(1&2)), 415-434 (2000), "Differential Transport of Cytosine-Containing Nucleosides by Recombinant Human Concentrative Nucleoside Transporter Protein hCNT1."	
	14	ERIC R. HARLEY ET AL., <u>Cancer Research</u> , 42, 1289-1295, April 1982, "Initial Rate Kinetics of the Transport of Adenosine and 4-Amino-7-( $\beta$ -D-ribofuranosyl) pyrrolo(2,3-d) pyrimidine (Tubercidin) in Cultured Cells"	
	15	CHARLES R. CRAWFORD ET AL., <u>Biochimica et Biophysica Acta</u> , 1024 (1990) 289-297, "Identification and reconstitution of the nucleoside transporter of CEM human leukemia cells"	
	16	MABEL W. L. RITZEL ET AL., <u>Molecular Membrane Biology</u> , 1998, 15, 203-211, "Molecular cloning, functional expression and chromosomal localization of a cDNA encoding a human Na <sup>+</sup> /nucleoside cotransporter (hCNT2) selective for purine nucleosides and uridine"	
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	18	BUDDY ULLMAN, <u>J. Physiol (Lord)</u> 1989 (Sept), 601:416-421, "Dideoxycytidine Metabolism in Wild Type and Mutant Cem Cells Deficient in Nucleoside Transport or Deoxycytidine Kinase"	
	19	HARALABIA BOLETI ET AL., <u>Neuropharmacology</u> , Vol. 36, No. 9, pp. 1167-1179, 1997, "Molecular Identification of the Equilibrative NBMPR-sensitive (es) Nucleoside Transporter and Demonstration of an Equilibrative NBMPR-insensitive (ei) Transport Activity in Human Erythroleukemia (K562) Cells"	
	20	CHRISTINE E. BOUMAH, DOUGLAS L. HOGUE AND CAROL E. CASS, <u>BioChem J.</u> (1992, 288, 987-996, "Expression of high levels of nitrobenzylthioinosine sensitive nucleoside transport in cultured human choriocarcinoma (BeWo) cells"	TECH CENTER 1600/2900 RECEIVED MAY 08 2002

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	21	XIAO FANG ET AL., <u>Biochem J. (1996) 317, 457-465</u> , "Functional characterization of a recombinant sodium-dependent nucleoside transporter with selectivity of pyrimidine nucleosides (cNT1) by transient expression in cultured mammalian cells"	
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	24	JOHN R. MACKEY ET AL., <u>Cancer Research 58, 4349-4357, October 1, 1998</u> , "Functional Nucleoside Transporters Are Required for Gemcitabine Influx and Manifestation of Toxicity in Cancer Cell Lines"	
	25	ALAN R. P. PATERSON ET AL., <u>1991 Elsevier Science Publishers BV, Chapter 13</u> , "Plasma Membrane Transport of Nucleosides, Nucleobases and Nucleotides: an overview"	
	26	BUDDY ULLMAN ET AL, <u>The Journal of biological Chemistry, Vol. 263, No. 25, Issue of September 5, pp. 12391-12396, 1988</u> , "Genetic Analysis of 2',3'-Dideoxycytidine Incorporation into Cultured Human T Lymphoblasts"	
	27	JOANNE M. UPSTON, ANNETTE M. GERO, <u>Biochimica et Biophysica Acta 1236 (1995) 249-258</u> , "Parasite-induced permeation of nucleosides in <i>Plasmodium falciparum</i> , malaria"	
	28	MACKY ET AL., <u>Drug Resistance Updates</u> , (1998) I, 310-324, "Nucleoside transport and its significance for anticancer drug resistance"	
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